ABSTRACT OF THE DISCLOSURE

A technique for transmitting a spread spectrum signal using plural non-contiguous frequency bands separated by segments of frequency spectrum excluded from use involves: generating a digital time-domain spread spectrum signal; converting the time-domain signal to a frequency-domain signal via an FFT; excising a portion of the frequency-domain signal by selectively removing frequency bins of the frequency-domain signal to cause spectral nulling of the transmit signal at the frequencies of the excluded segments; and converting the excised frequency-domain signal to an excised time-domain signal via an inverse FFT, which is then converted to an analog signal for transmission. The non-contiguous spectrum selection technique is implemented in a transmitter that transmits data communication signals or navigation signals, and permits use of plural, non-contiguous frequency bands to transmit a wide bandwidth signals that cannot be transmitted in a continuous frequency band due to constrains in the allocated frequency spectrum available for transmission.